



SCOPE OF USE: VIETNAM CLIMATE IMPACTS DECISION SUPPORT TOOL



JUNE 2014

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ACRONYMS

CIMPACT-DST Climate Impacts Decision Support Tool

EPO Environmental Professionals Organization

IMHEN Institute of Meteorology, Hydrology, and Environment

IRURE Institute for Environmental Planning, Urban-Rural Infrastructure

KOICA Korean International Cooperation Agency

LURCs land use rights certificates

MOC Ministry of Construction

MONRE Ministry of Natural Resources and the Environment

SEA Strategic Environmental Assessment

USAID United States Agency for International Development

VIUP Vietnam Institute for Urban-Rural Planning

VUPA Vietnam Urban Planning Association

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I. EXECUTIVE SUMMARY

This Scope of Use document arrives at the following key points, decisions, and outcomes:

1. The Tool will have the potential for broad application across a wide array of professionals, organizations, plan types, sectors, and locations. Specifically, the Tool will encompass the following scopes of use:

Entity	Targets for the Tool
Political Jurisdictions	All within provinces and centrally-controlled cities, including districts, provincial cities, communes, and wards
Urban Classes All urban classes from "Special" to Class V	
Administrative Levels	All levels, including centrally-controlled cities, provincial cities, towns, and townships
Planning Stages	Between Stages 2 and 3 (Data Collection and Analysis, respectively) and during the SEA, which is typically between Stages 4 and 5 (Selection of Orientations and Construction Plan Establishment)
Sectors	Spatial planning, land use planning, urban design, transportation, water supply, wastewater, ground leveling and drainage, electricity supply and lighting, information and communication, solid waste, and cemetery
Professions	Users: Planners, engineers, managers, directors Audience: Users, political leaders, reviewers, managers
Organizations	Users: Government departments, institutes and agencies; domestic and foreign consultancies Audience: MOC, People's Committees, construction project investors

Table 1-1. Tool Scope of Use Summary

2. The team will pursue a phased plan for disseminating the Tool to its target Audience and Users, detailed in Table 2-2 below.

Phase	Timeframe	Responsible Party
1 Internal Tool use by planners at VIUP and/or IRURE	March-April 2014	Cascadia
2 Tool testing in select locations across the country	May-June 2014	Cascadia
3 Tool introduction at national workshop	July 2014	Cascadia
4 Ongoing Tool trainings, pilot testing, and evaluation	2014-2015	VIUP/IRURE
5 Continued Tool dissemination, use, and maintenance	2016 and beyond	VIUP/IRURE

Table 2-2. Summary of Phased Approach to Tool Dissemination

3. The extent to which the Tool dissemination and use described in Point 1 and 2 is realized will be dependent upon the success of Tool trainings, administration, and dissemination; the success and attendance of the national workshop; and the formal integration of the Tool into standard urban and construction planning processes.

2. OVERVIEW

Cascadia Consulting Group (Cascadia), on behalf of the U.S. Agency for International Development (USAID) and in collaboration with the Vietnam Institute for Environmental Planning, Urban-Rural Infrastructure (IRURE) and the Vietnam Institute for Urban-Rural Planning (VIUP), plans to configure, test, and deploy Cascadia's Climate Impacts Decision Support Tool (CIMPACT-DST, the "Tool") at the national level in support of integrating climate change considerations into planning activities in cities and provinces in Vietnam.

This Scope of Use document, the third in a series of planning documents being crafted to guide development of the Tool, begins with an overview of key points, decisions, and outcomes, and then follows with detailed descriptions of the Tool's target:

- Planning types
- Locations and jurisdictions
- Sectors
- Audience and Users, including their professions and organizations

The document concludes with a description of the project approach for disseminating the Tool throughout its scope of use over the project timeframe.

PROJECT DOCUMENTS FOR NATIONAL VIETNAM CLIMATE PLANNING TOOL

This Scope of Use is part of a series of documents being crafted to guide customization of the national Vietnam climate planning tool (CIMPACT-DST):

PROJECT DESCRIPTION

Introduces the concepts, goals, objectives, and tasks of the project, including detail on anticipated timeframes, roles and responsibilities, and target users and outcomes.

BETA TOOL

TOOL CONCEPTUAL **MODEL**

Presents the conceptual organization and flow of the Tool.

USER SCENARIOS & NARRATIVES

Describes scenarios in which the Tool could be applied and how target users may employ the Tool to identify and utilize climate information.

SCOPE OF USE

Introduces Vietnam's planning framework, geographies, and sectors; characterizes the target Tool audience; and proposes a plan for rolling out the Tool more broadly over time.

NEEDS ASSESSMENT

Provides the foundation for the project by describing 1) the underlying need and motivation for a climate mainstreaming tool and 2) how a tool could help address those needs.

3. SPHERE OF APPLICATION

The pool of potential Tool managers and users will ultimately depend on the *types*, *locations*, and *stages* of planning to which the Tool will apply. This section describes those types and their implications for where and by whom the Tool will be used. For more information on the bases of these specifications within the Vietnam urban planning process and classification system, see Appendix A: The Vietnam Planning Process and Classification System.

3.1. PLANNING TYPES

As detailed in Appendix A, the Tool will apply to the following types of urban and/or construction plans (see Figure A-1 for a list of plan types and their organization in Vietnam):

- Provincial regional construction plans
- General (master) urban and construction plans
- Zoning urban plans
- Detailed urban and construction plans
- Specialized technical infrastructure plans

Due to resource and time constraints, the Tool will not incorporate the following other types of plans in Vietnam, which were identified as lower priority than the above listed types:

- Other regional construction plans, including inter-provincial, inter-suburban district, and suburban district regional plans
- Construction plans for rural population quarter

3.2. LOCATIONS

3.2.1. POLITICAL CLASSIFICATION

Due to its more extensive use to date in Vietnam (VIUP, personal communication), as well as project time and resource constraints, the national CIMPACT-DST will only cover provincial regional planning, which has a single-province focus.

The national CIMPACT-DST will apply to all political jurisdictions, from the province or city level for regional and general planning, to the ward or commune level for detailed planning.

3.2.2. URBAN PLANNING CLASSIFICATION

The national CIMPACT-DST could apply to all four administrative levels and all six classes of urban areas in Vietnam.

Figure 3-1 on the following page summarizes the types of locations (e.g., provinces, cities, towns) relevant to each planning type scoped for inclusion in the Tool. Provincial regional plans pertain to individual provinces, including centrally-controlled cities; while general, detailed, and zoning plans pertain to the entirety or portions of cities and towns, including those of centrally-controlled cities. Specialized technical infrastructure plans only pertain to centrally-controlled cities.

Figure 3-2 and Table 3-1 on pages 6 and **Error! Bookmark not defined.**, respectively, provide lists of jurisdictions to which the Tool could apply, including provinces (63, including the centrally controlled cities), centrally-controlled cities (5), and provincial cities (56). Note that these lists are not exhaustive:

the Tool could additionally cover towns and townships. Together, the Tool could apply to all 63 provinces and all 760+ Class V or above cities and towns in Vietnam.

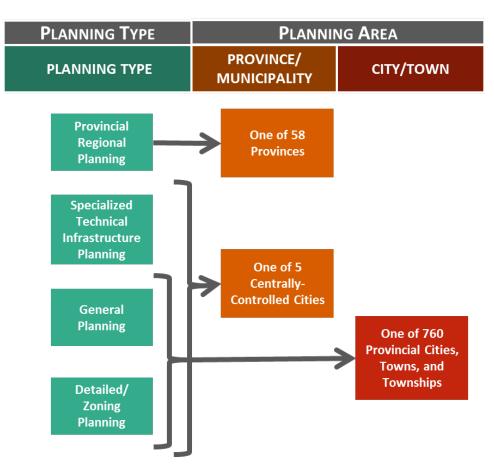


Figure 3-1. Relationship between Planning Types and Geographical Jurisdictions

1Lai Chau33Quang Nam2Dien Bien34Quang Ngai3Son La35Binh Dinh4Hoa Binh36Phu Yen5Ha Giang37Khanh Hoa6Cao Bang38Ninh Thuan7Lao Cai39Binh Thuan8Yen Bai40Kon Tum9Tuyen Quang41Gia Lai10Bac Kan42Dak Lak11Thai Nguyen43Dak Nong12Lang Son44Lam Dong	
3 Son La 35 Binh Dinh 4 Hoa Binh 5 Ha Giang 6 Cao Bang 7 Lao Cai 8 Yen Bai 9 Tuyen Quang 10 Bac Kan 11 Thai Nguyen 43 Binh Thuan 40 Kon Tum 41 Gia Lai 42 Dak Lak 41 Dak Nong	
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12 Lang Son 44 Lam Dong	
12 Land John TT Lani Dong	
13 Phu Tho 45 Tay Ninh	
14 Bac Giang 46 Binh Duong	
15 Quang Ninh 47 Binh Phuoc	
16 Vinh Phuc 48 Tp. Ho Chi M	nh
17 Bac Ninh 49 Dong Nai	
18 Ha Noi 50 Ba Ria	
19 Hung Yen 51 Long An	
20 Hai Duong 52 Dong Thap	
21 Hai Phong 53 Tien Giang	
22 Ha Nam 54 Ben Tre	
23 Thai Binh 55 Vinh Long	
24 Nam Dinh 56 Tra Vinh	
25 Ninh Binh 57 An Giang	
26 Thanh Hoa 58 Can Tho	
27 Nghe An 59 Hau Giang	
28 Ha Tinh 60 Soc Trang	
29 Quang Binh 61 Bac Lieu	
30 Quang Tri 62 Kien Giang	
31 Thua Thien 63 Ca Mau	
32 Da Nang	

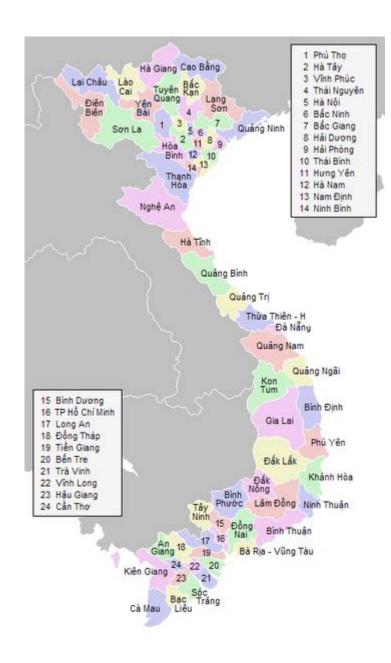


Figure 3-1. Provinces and Centrally-Controlled Cities of Vietnam (n=63) (Centrally-controlled cities are indicated by a darker shade of grey)

City name	Province	Area (km²)	Population	Year Est.	City class
Bà Rịa	Bà Rịa–Vũng Tàu	91.46	122,424	2012	3
Bạc Liêu	Bạc Liêu	175.4	188,863	2010	3
Bắc Giang	Bắc Giang	32.21	126,810	2005	3
Bắc Ninh	Bắc Ninh	80.28	153,250	2006	3
Bảo Lộc	Lâm Đồng	232.6	153,362	2010	3
Biên Hòa	Đồng Nai	264.1	784,398	1976	2
Bến Tre	Bến Tre	67.48	143,312	2009	3
Buôn Ma Thuột	Đắk Lắk	370	340,000	1995	1
Cà Mau	Cà Mau	250.3	204,895	1999	2
Cẩm Phả	Quảng Ninh	486.4	195,800	2012	3
Cao Lãnh	Đồng Tháp	107.2	149,837	2007	3
Đà Lạt	Lâm Đồng	393.3	256,393	1920	1
Điện Biên Phủ	Điện Biên	60.09	70,639	2003	3
Đông Hà	Quảng Trị	73.06	93,756	2009	3
Đồng Hới	Quảng Bình	155.5	103,988	2004	3
Hà Tĩnh	Hà Tĩnh	56.19	117,546	2007	3
Ha Long	Quảng Ninh	208.7	203,731	1994	2
Hải Dương	Hải Dương	71.39	187,405	1997	2
Hòa Bình	Hòa Bình	148.2	93,409	2006	3
Hội An	Quảng Nam	61.47	121,716	2008	3
Huế	Thừa Thiên–Huế	83.3	333,715	1945	1
Hưng Yên	Hưng Yên	46.8	121,486	2009	3
Kon Tum	Kon Tum	433	137,662	2009	3
Lạng Sơn	Lạng Sơn	79	148,000	2002	3
Lào Cai	Lào Cai	221.5	94,192	2004	3
Long Xuyên	An Giang	106.9	227,300	1999	2
Móng Cái	Quảng Ninh	518.3	108,016	2008	3
Mỹ Tho	Tiền Giang	79.8	215,000	1928	2
Nam Đinh	Nam Định	46.4	191,900	1921	1
Ninh Bình	Ninh Bình	48.3	130,517	2007	3
Nha Trang	Khánh Hòa	251	392,279	1977	1
Cam Ranh	Khánh Hòa	325	128,358	2010	3
Phan Rang-Tháp Chàm		79.37		2010	3
Phan Thiết	Ninh Thuận Bình Thuận	206	102,941 255,000	2007	2
Phủ Lý	Hà Nam	34.27	121,350	2010	3
·					2
Pleiku	Gia Lai Quảng Ngãi	260.6 37.12	186,763	1999 2005	3
Quảng Ngãi	0 0		134,400		1
Quy Nhơn Rach Giá	Bình Định	284.3	311,000	1986	3
1	Kiên Giang	97.75	228,360	2005	3
Sóc Trăng	Sóc Trăng	76.15	173,922	2007	· ·
Sơn La	Sơn La	324.9	107,282	2008	3
Tam Kỳ	Quảng Nam	92.63	120,256	2006	3
Tân An	Long An	81.79	166,419	2009	3
Thái Bình	Thái Bình	67.69	186,000	2004	3
Thái Nguyên	Thái Nguyên	189.7	330,000	1962	1
Thanh Hóa	Thanh Hóa	57.8	197,551	1994	2
Trà Vinh	Trà Vinh	68.03	131,360	2010	3
Tuy Hòa	Phú Yên	212.6	167,174	2005	3
Tuyên Quang	Tuyên Quang	119.2	110,119	2010	3
Uông Bí	Quảng Ninh	256.3	170,000	2011	3
Việt Trì	Phú Thọ	111	277,539	1962	1
Vinh	Nghệ An	105	282,981	1927	1
Vĩnh Yên	Vĩnh Phúc	50.8	122,568	2006	3
Vĩnh Long	Vĩnh Long	48.01	147,039	2009	3
Vũng Tàu	Bà Rịa–Vũng Tàu	140	240,000	1991	1
Yên Bái	Yên Bái	108.2	95,892	2002	3

Table 2-1. Provincial Cities of Vietnam (n = 56; Source: Wikipedia, 2010)

3.3. PLANNING STAGES

Urban planning in Vietnam typically proceeds in the following stages:

- 1. Establishment of Planning Requirements
- 2. Data Collection
- 3. Analysis
- 4. Selection of Orientations
- 5. Construction Plan Establishment
- 6. Assessment and Approval
- 7. Plan Implementation and Management

Across all planning types, use of the Tool would most likely occur at two points within these stages:

- **Between Stages 2 and 3:** At this point between Data Collection and Analysis, planners would use the Tool to guide plan development.
- **Between Stages 4 and 5:** At this point between Selection of Orientations and Construction Plan Establishment, the Tool would be used as part of the SEA to ensure that the plan appropriately considers climate change impacts.

3.4. SECTORS

Because the Tool will include impact summaries and guidance information for both general urban planning and specialized technical infrastructure planning, it will offer outputs specific to the sectors and included in both types of planning. Specifically, the Tool will cover the following sector categories (those common to all planning types are in bold):

- Spatial planning
- Land use planning
- Urban design
- Transportation
- Water supply
- Cemetery

- Wastewater
- Ground leveling and drainage
- Electricity supply and lighting
- Information and communication
- Solid waste

The relationship between these categories and the planning types of the Tool is depicted in Figure 3-3 on the following page. The bolded items in the above list will be included across planning types, while impact and guidance information related to spatial planning, land use planning, and urban design will only be offered for Tool Users conducting provincial regional, general, or detailed/zoning planning.

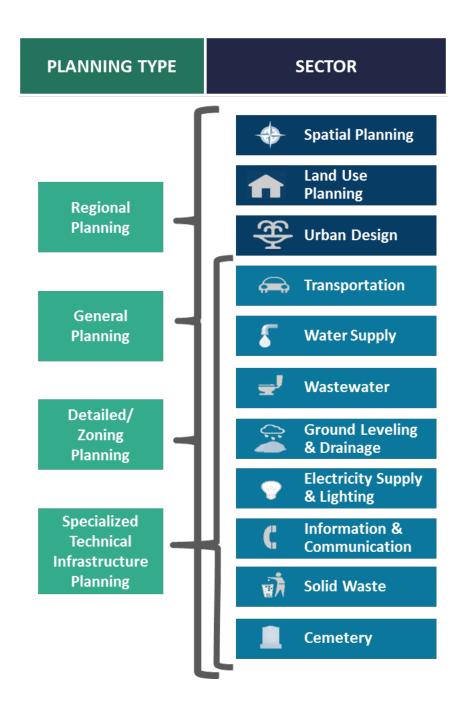


Figure 2-3. Relationship between Planning Types and Sectors in the Tool

3.5. AUDIENCE AND USERS

The Tool will serve two primary groups of persons: 1) a *Tool Audience* that includes both Tool Users and indirect consumers and reviewers of Tool information, and 2) *Tool Users* who directly employ the Tool to inform plan development. The distinction between these groups is illustrated in Figure 3-4 below.

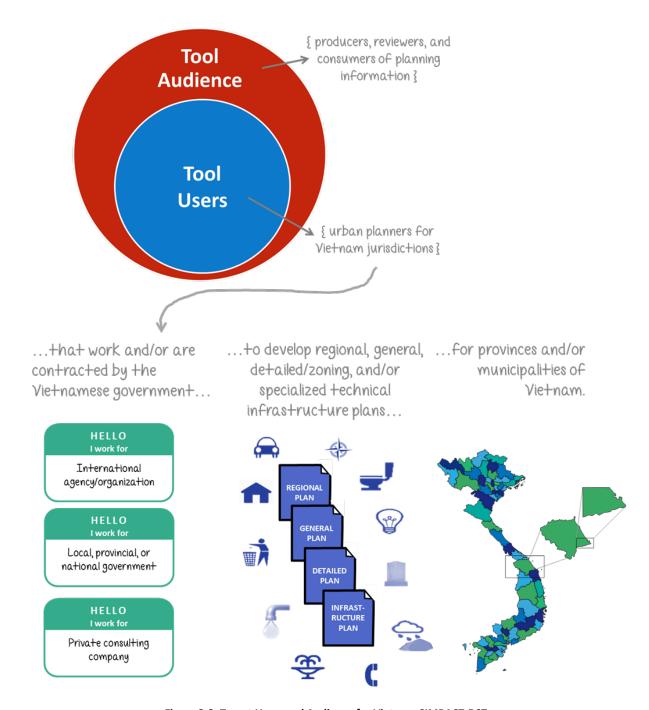


Figure 3-3. Target Users and Audience for Vietnam CIMPACT-DST

3.5.1. TOOL AUDIENCE

The Tool Audience will include individuals who directly interface with the Tool, as well as individuals who indirectly interact with urban and construction plans through their management, review, and/or approval.

The Urban Planning Law (No. 30/2009/QH12, Section 1, Article 19) delineates responsible parties for each planning type and administrative level (see Table 3-2 on page 12). These responsible parties, who would compose the Tool Audience, include the following:

- Ministry of Construction (MOC)
- People's Committees of provinces and centrally-run cities, provincial cities and towns, urban districts, rural districts of a centrally-run city, and rural districts of a province
- Investors in construction projects

The Tool Audience would also include local and national professional associations and nongovernmental organizations, such as the Vietnam Urban Planning Association (VUPA), Environmental Professionals Organization (EPO), Association of Architecture and Planning, and provincial associations of urban planning.

Planning Type	Administrative Level	Responsible Party
General Planning	 New urban centers: related to two or more provinces and centrally-run cities; or with projected population equal to grade III or higher; or other plans assigned by the Prime Minister 	MOC, in coordination with the People's Committees of provinces and centrally-run cities
	Centrally-run citiesNew urban centers	People's Committees of provinces and centrally-run cities
	Provincial cities and towns	People's Committees of provincial cities and towns
	• Townships	People's Committees of rural districts of a centrally-run city People's Committees of rural districts of a province
Zoning Planning	 Related to two or more rural/urban districts Areas in new urban centers and areas of importance 	People's Committees of provinces and centrally-run cities
	Within administrative boundaries under their management	People's Committees of provincial cities and towns People's Committees of urban districts
		People's Committees of rural districts of a centrally-run city
Detailed Planning	 Related to two or more rural/urban districts Areas in new urban centers and areas of importance 	People's Committees of provinces and centrally-run cities
	Within administrative boundaries under their management	People's Committees of provincial cities and towns
	- William administrative boundaries dider their management	People's Committees of urban districts
	TownshipsWithin administrative boundaries under their management	People's Committees of rural districts of a centrally-run city
	• Townships	People's Committees of rural districts of a province
	Areas assigned to them for investment	Investors of construction investment projects
Specialized Infrastructure Planning	Centrally-run cities	People's Committees of provinces and centrally-run cities

Table 3-2. Responsible Parties, by Planning Type and Administrative Level (Source: Urban Planning Law)

3.5.2. TOOL USERS

The Tool Users include all individuals involved directly in the development or assessment of provincial regional, general, zoning, detailed, or specialized technical infrastructure plans for one of 58 provinces, 5 centrally-controlled cities, or 760 official cities/towns of Vietnam. These individuals include managers, directors, engineers, and planners from domestic and foreign consultancy organizations.

Consultancy organizations that often create plans for Vietnam include international agencies, non-profit organizations, private companies, and government departments, institutes, and agencies. Examples of specific applicable Tool Users from each of these organizations are listed in Table 3-3 below. This pool of applicable Tool Users will interface directly with the Tool to identify, gather, and assess climate impacts and guidance information relevant to their planning project.

Organization Type	Example User Organization	Role	Example Planning Activity
Government Departments, Institutes, and Agencies	VIUP	Development of regional, general, zoning, and detailed plans and building architectural designs	Developed the Regional Construction Master Plan for Cuu Long River Delta Region to 2020, Vision to 2050
	IRURE	Strategic Environmental Assessment (SEA) of urban and construction plans	SEA for Hanoi Master Plan to 2030 and Vision to 2050
Domestic Consultancies	Local Planning Institutes	Development of general, zoning, and detailed plans	Developed the New General Master Plan for Vinh Thanh Commune in Thua Thien Hue Province
Foreign Consultancies	Korean International Cooperation Agency (KOICA)	Development of general, zoning, and detailed plans	Currently modifying the General Urban Master Plan for the City of Hue

Table 3-3. Applicable Tool Users, by Organization Type

4. RECOMMENDED PLAN FOR DISSEMINATION

Ultimately, this project seeks to disseminate the national CIMPACT-DST such that it can be used in day-to-day urban and construction planning across the country of Vietnam. Understanding that nationwide use will not occur overnight, we propose a phased approach to Tool dissemination that begins with limited internal use and concludes with widespread, nationwide use. Specifically, we recommend developing the distribution and use of the Tool in the following phases (see Figure 4-1 below):

- 1. Internal Tool use by planners at VIUP and/or IRURE
- 2. Tool testing at two focus cities
- 3. Tool introduction at July 2014 national workshop
- 4. Ongoing Tool trainings and feedback
- 5. Nationwide Tool dissemination and use

While the beta Tool is being developed, internal testers from VIUP and IRURE as well as users from two focus cities will employ the Tool. Feedback from this use will inform development of the final Tool, which will be introduced at a widely attended national workshop in July 2014. Upon release of the final Tool, we recommend that VIUP and/or IRURE, as able, assume primary responsibility for ongoing Tool trainings, incorporation of user feedback, updates, and nationwide dissemination and use.

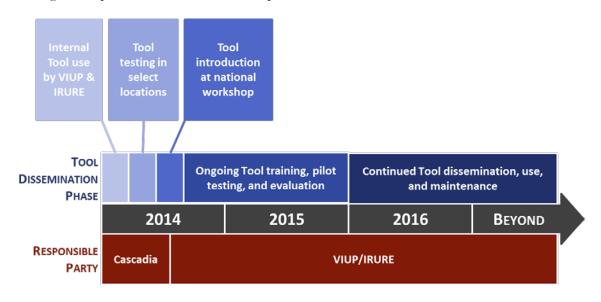


Figure 4-1. Phased Approach to Tool Dissemination

Each of the above phases is described in more detail on the following page.

4.1. INTERNAL TOOL USE BY PLANNERS AT VIUP AND/OR **IRURE**

Timeframe | March/April 2014 Objectives | Proficient use/testing of Tool by select planners at VIUP and/or IRURE

The beta Tool will be released in March/April 2014 for use and testing by select planners at VIUP and IRURE. Cascadia will conduct trainings on Tool use and administration, and feedback from those trainings and Tool use will be integrated into the final Tool version, released in July 2014.

4.2. TOOL TESTING IN TWO FOCUS CITIES

Timeframe	May/June 2014
Objectives	Proficient use/testing of Tool by planners at three select locations across the
	country

After internal Tool testing and use within VIUP and IRURE, users in two select, representative locations across the country will be trained on the Tool. Trained planners will be encouraged to use the Tool and provide feedback, which will be integrated into the final Tool version, released in July 2014.

4.3. TOOL INTRODUCTION AT JULY 2014 NATIONAL **WORKSHOP**

Timeframe	July 2014
Objectives	Proficient understanding of Tool use and objectives by diversity of planners
	representing a wide range of geographies across the country

The final Tool will be released at a national workshop in July 2014. The workshop will present an opportunity for planners and managers across the country to learn about the Tool and its use. We hope that the workshop will equip and motivate planners to begin exploring the Tool's functionality and testing the Tool on their upcoming urban and construction planning projects.

4.4. ONGOING TOOL TRAININGS, PILOT TESTING, AND **EVALUATION**

Timeframe	2014-2015
	Continued understanding and proficient use of Tool by wide diversity of
	planners representing a wider range of geographies across the country than
	in initial dissemination workshop

Understanding that a one-day workshop will likely be insufficient for training the entirety of planners across Vietnam, we recommend that IRURE and VIUP assume responsibility for continuing to train planners across the country and disseminate the Tool to them after the workshop. Ideally, the final Tool will be released onto an accessible online platform, from which planners can access and download the most recent versions for use within their respective planning projects. During this time, VIUP and IRURE will also continue evaluating the Tool through received user feedback.

4.5. NATIONWIDE TOOL DISSEMINATION AND USE

Timeframe | 2016 and beyond | Objectives | Proficient use of Tool by applicable planners across the country

After one year of Tool testing, use, and feedback from trained users across the country, we envision that the vetted and potentially revised (if needed) Tool will have become a standard and potentially required component of the planning process. Ideally, the majority of target users across the country will have been trained on the Tool and will have proficiently applied the Tool at least one project. For those who have not been trained, the User Guide will provide sufficient instructions for Tool use. Through this time and beyond, we recommend that VIUP and IRURE assume responsibility for updating and maintaining the Tool as new information, policies, or approaches arise. We also recommend that VIUP and IRURE continue to conduct trainings, as needed and able.

5. CONCLUSION

With the ability to customize outputs to any level of detail or organization, the Vietnam national CIMPACT-DST tool holds the potential for broad application across a wide array of professionals, plan types, sectors, and locations. Applicable to regional, general, zoning, detailed, and specialized technical infrastructure planning across the country, the Tool will serve as a key resources that can be used directly by planners, engineers, managers, and directors at government departments, institutes, and agencies, and at domestic and foreign consultancies, to identify and act on projected climate impacts. The Tool will also be an important resource for entities that manage, review, or approve urban and construction plans, such as the Ministry of Construction, People's Committees, and construction investors, as well as urban planning-related NGOs and professional associations.

To achieve this vision and realize the Tool's potential, we recommend that Cascadia, VIUP, and IRURE pursue a phased approach for disseminating the Tool to its target audience and users. The approach begins with limited internal and external distribution and use in 2014, and later extends to full, nationwide use and integration by 2016.

Although this phased approach sets the stage for widespread future use, the ultimate extent to which target Tool users and audiences employ the Tool will be dependent upon many factors, some of which the team will have limited influence over. The helpfulness of Tool trainings, the effectiveness of the Tool's administration and dissemination by VIUP/IRURE, and the success and attendance of the national workshop are all factors the team will strive to optimize. The extent to which the Tool is integrated into standard urban and construction planning processes, however, may be dependent upon the existence of government incentives, such as legal obligations, over which the team will have little influence.

LITERATURE CITED

Urban Planning Law (No. 30/2009/QH12) ratified by the National Assembly of Socialist Republic of Vietnam dated 17 June 2009.

APPENDIX A: THE VIETNAM PLANNING PROCESS AND **CLASSIFICATION SYSTEM**

To thoroughly assess the needs and scope of use of CIMPACT-DST, it is important to examine the planning process and consider the stages and components of the process to which climate information provided by the Tool may be relevant.

Our understanding of the planning process, described in this section, is derived from the following national policies:

Construction Policies

- The Law of Construction (No. 16/2003/QH11) stipulates construction activities and the rights and obligations of organizations and individuals investing in construction of works and engaging in construction activities.
- Decree No. 08/2005/ND-CP on Construction Planning provides detail on the tasks, timelines, jurisdictions, contents, and processes for each construction planning type.
- Circular No. 07/2008/TT-BXD on Guidelines for Formulation, Appraisal, Approval, and Management of Construction Plans elaborates on Decree No. 08/2005/ND-CP with more specific guidelines and requirements for objectives, tasks, considerations, and content of plans for each construction planning type.
- Decision No. 03/2008/QD-BXD on Contents of Maps and Reports for Construction **Planning** provides further detail specifically on the drawings and maps produced through the construction planning process, including a breakdown of content by sector.

Urban Planning Policies

- The Law of Urban Planning (No. 32/2009/AH12) stipulates the various types of urban plans, urban hierarchies, administrative levels in Vietnam, including specifications around the contents, scales, timeframes, and bases for each urban planning type and administrative level combination.
- Decree No. 37/2010/ND-CP on Formulation, Evaluation, Approval and Management of Urban Planning discusses in more detail the content of general, zoning, detailed, specialized technical infrastructure plans, including differentiation among plans for various administrative levels.
- Circular No. 10/2010/TT-BXD on Contents of Urban Planning Types defines the tasks and schemes for each urban planning type, including requirements on the plan's general explanation and drawing components.

Other Relevant Policies

- Circular No. 01/2011/TT-BXD on Guidelines for SEA for Construction/Urban Planning Projects provides guidance on the strategic environmental assessment (SEA) of construction and urban plans, including specific guidance on the steps, contents, reporting of SEA. SEA contents are provided for each planning type.
- The Law of the Land (No. 13/2003/QH11) stipulates the powers and responsibilities of the Government in owning and leasing of the land of Vietnam.
- Decision No.2623-QD-TTg on Urban Development Response to Climate Change 2013 2020 details the scope, timeline, obligations, and tasks for implementing urban development programs and projects that respond to climate change.

In the following sections, we summarize 1) the country's two primary planning categories, 2) the urban classification hierarchy of Vietnam, 3) the country's various types of plans, and 4) the primary stages of urban planning. For each of these factors, we consider how the Tool may fulfill that factor's diverse needs and characteristics.

A.I. PRIMARY PLANNING CATEGORIES

There are two overarching categories of planning in Vietnam: 1) **Construction Planning** and 2) **Urban Planning**. Each planning category has its own set of policies and plans. **The national CIMPACT-DST will cover both types.**

Construction plans – which include regional, urban (general and detailed), and construction plans for rural population quarters – were initially stipulated in 2004 by the Construction Law (No. 16/2003/QH11).

Urban plans – which include general, zoning, detailed, and specialized technical infrastructure plans - were initially stipulated in 2009 by the Urban Planning Law (No. 30/2009/QH12). Figure A-1 on page 21 depicts the types of plans relevant to these planning categories and Table A-1 lists the planning categories' guiding policy documents. Both Construction and Urban Planning includes general and detailed plans. **The national CIMPACT-DST will cover the following plan types:**

- Intra-provincial regional construction plans
- General (master) construction and urban plans
- Zoning urban plans
- Detailed construction and urban plans
- Specialized technical infrastructure urban plans

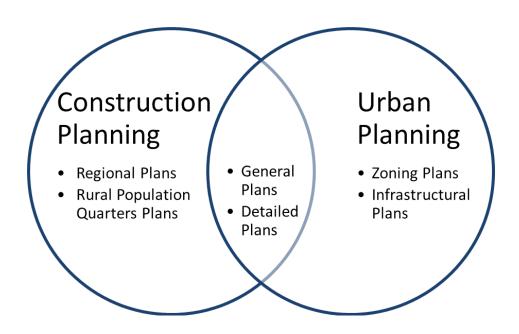


Figure A-1. Planning Types, by Planning Category

Policy Description	Construction Planning Policy	Urban Planning Policy		
Foundational law describing the activities	No. 16/2003/QH11 on the Law of			
of planning types (including elaboration,	Construction;	No. 32/2009/AH12 on the Law of		
evaluation, approval, and adjustment processes; implementation organization;	Decree No. 08/2005/ND-CP on	Urban Planning		
and management or urban development)	Construction Planning			
Guidelines for formulation, appraisal,	Circular No. 07/2008/TT-BXD on	Decree No. 37/2010/ND-CP on		
approval, and management of planning	Guidelines for Formulation,	Formulation, Evaluation,		
types	Appraisal, Approval, and	Approval and Management of		
	Management of Construction Plans	Urban Planning		
Contents of planning types	Decision No. 03/2008/QD-BXD on	Circular No. 10/2010/TT-BXD		
	Contents of Maps and Reports for	on Contents of Urban Planning		
	Construction Planning	Types		
Guidelines for strategic environmental	Circular No. 01/2011/TT-BXD on Guidelines for SEA for			
assessment of plans	Construction/Urban Planning Projects			
Plan for responding to climate change	Decision No.2623-QD-TTg on Urban Development Response to			
in urban development (including scope, goals, and obligations)	Climate Change 2013 – 2020			

Table A-1. Planning Policies, by Planning Category

A.2. JURISDICTIONAL CLASSIFICATION HIERARCHIES

A.2.1. POLITICAL CLASSIFICATION

A.2.I.I. REGIONS

Generally, there are four primary types of regional construction plans, which vary by their covered political boundaries:

- Inter-provincial regional planning spans two or more provinces
- Provincial regional planning spans one province
- Inter-district regional planning spans two or more sub-urban districts
- District regional planning spans one sub-urban district

A.2.1.2. PROVINCES AND CENTRALLY-CONTROLLED CITIES

Jurisdictions in Vietnam are primarily classified into one of two buckets: 1) centrally-controlled city, or 2) province. There are 58 provinces and 5 "centrally-controlled cities." The provinces are divided into districts, provincial cities, and district-level towns, while the centrally-controlled cities are subdivided into rural districts, district-level towns, and urban districts. These groups are further subdivided into communes, wards, and/or commune-level towns. This political organization is illustrated in Figure A-2 below.

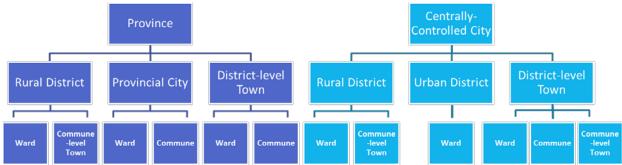


Figure A-2. Political Hierarchy of Vietnam

A.2.2. URBAN PLANNING CLASSIFICATION

According to the 2009 Urban Planning Law, urban centers in Vietnam are classified into six classes and four administrative levels based on location, function, socio-economic distribution/development, population, population density, non-agricultural employment, and infrastructure development (Urban Planning Law, Chapter 1, Article 4; see Table A-2 for a full list of classes and levels).

Table A-2 below lists the urban classification hierarchy, along the types of urban plans created for each hierarchical level. The system is such that administrative levels often "straddle" classes; for example, all centrally-controlled cities are Class Special or I, but not all Class I cities are centrally-controlled.

Currently, there are five centrally controlled cities in Vietnam:

- Can Tho
- Da Nang
- Hai Phong
- Ha Noi
- Ho Chi Minh City

In addition to these five centrally-controlled cities, there are a total of over 760 cities and towns.

					Applicable Planning Types			
Class Administr			ative Level		General	Zoning	Detailed	Tech. Infrastruct.
Special	Central							
	city							
'								
II		Provincial						
"		city						
III								
""			Town					
IV			IOWII					
10								
v	Township			Township				

Table A-2. Vietnam Urban Classification Hierarchy

A.3. OTHER CLASSIFICATIONS

A parallel system for land-use planning (Land Law, No. 13/2003/QH11) not under MOC jurisdiction exists. Under the Ministry of Natural Resources and the Environment (MONRE), this planning governs land use types and classes and determines legal entitlements promulgated through "land use rights certificates" (LURCs). Although this Needs Assessment document does not address the Land Law or LURCs, consideration of their interrelationship with the planning activities under MOC's jurisdiction will likely be important to ensure true climate resilient development.

A.4. PLANNING TYPES

Vietnam has six primary types of urban and construction planning, which vary by content, scale, and targeted geographies:

- Regional Planning
- General Planning
- Zoning Planning
- Detailed Planning
- Specialized Technical Infrastructure Planning
- Rural Population Quarter Planning

Because of their largely urban focus, the national CIMPACT-DST will apply to the first five of the six above listed plan types. These plan types represent a wide range of scales and contents, with scales that range from 1:2,000 to 1:50,000, and contents that range from the identification of key economic zones to the specification of standard ground floor levels along specific streets.

An overview of the scales of various planning types to be integrated in the national CIMPACT-DST is provided in Figure A-3 and Table A-3 below.

Planning Type	Resolution	Scale
Provincial Regional	Intra-Provincial	1:25,000 - 1:50,000
General	Intra-Municipal	1:5,000 - 1:25,000
Detailed/Zoning	Intra-District/Zone	1:2,000 - 1:5,000
Specialized Technical Infrastructure	Intra-Municipal	1:10,000 - 1:25,000

Table A-3. Scales for Urban Planning in Vietnam

The following sections detail each of the above five planning types to be integrated into the national CIMAPCT-DST, including information on their objectives, contents, and timeframes. A comparative summary of their contents across sectors is provided in Table A-4 on page 34.

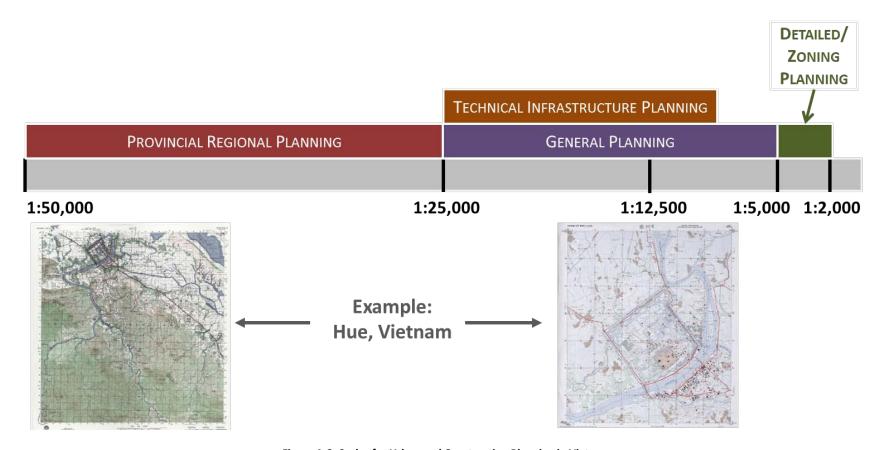


Figure A-3. Scales for Urban and Construction Planning in Vietnam

A.4.1. REGIONAL PLANNING

Scale Variable, 1:50,000 for Provincial Regional Planning
Geographic Extent Variable, from intra-district to inter-provincial scale

Regional plans—construction plans developed for regions with general or specialized functions—is legally defined in Vietnam as the following (Construction Law, Chapter 1, Article 3):

Regional construction master planning [is the] organization of systems of rural residential areas and technical and social infrastructure works within the administrative boundaries of any one province or inter-provincial area consistent with the requirements for socio-economic development from time to time.

Regional plans are meant to provide better coordination between urban planning and infrastructure development and provide a basis for general urban planning. Examples of general or specialized function zones include the following (Decree No. 08/2005/ND-CP, Chapter 2, Article 8, point 2):

- Industrial, agricultural, forestry, fishery, and tourist regions
- Historical/cultural relic regions
- Natural landscape and heritage protection regions
- Regions where construction is banned
- Development reserve regions

The term "Regional Planning" in Vietnam includes the following planning types, which vary by scale:

- Inter-provincial Regional Planning: planning that spans two or more provinces
- Provincial Regional Planning: planning that spans one province
- Inter-suburban District Regional Planning: planning that spans two or more sub-urban districts
- Sub-urban District Regional Planning: planning that spans one sub-urban district

Provincial regional planning is the most common form of regional planning in Vietnam. As of now, the Vietnamese government has only approved eleven inter-provincial regional plans (VIUP, personal communication).

Because it is the most common form, the first iteration of the national CIMPACT-DST will focus on provincial regional planning.

Regional plans must be developed in accordance with regional socio-economic development requirements. Content for plans include the following (Decree No. 08/2005/ND-CP, Chapter 2, Article 8; Circular No. 07/2008/TT-BXD, Part 2, Section 1; Decision No. 03/2008/QD-BXD, Regulations on Contents of Explanatory Statements of Construction Master Plans and Tasks, Part A, Section 1):1

- Evaluation of natural, economic, and social conditions
- Determination of urban centers, population spots, and special regions (e.g., industrial, cultural relic, etc.)
- Determination of networks, positions, and sizes of key technical infrastructure
- Listing of projected development priority items and implementation resources
- Forecasting of environmental impacts and blueprint-driven impact mitigation measures

Additional detail on the contents of these plans provided in the Regulations on Contents of Explanatory Statements of Construction Master Plans and Tasks of Decision No. 03/2008/QD-BXD, Part A, Section 1.

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A.4.2. GENERAL PLANNING

Scale | 1:5,000 - 1:25,000 | Cities, towns, townships, new urban centers | Extent |

These plans, often called urban "master" plans, are formulated for all Class V or above jurisdictions and new urban centres. General urban planning is be made for short periods of 5 years or 10 years or long periods of 20 years or more. They serve as a basis for conducting specialized urban technical infrastructure planning, zoning planning, and/or detailed planning for a city, and in some cases for developing technical infrastructure construction investment projects (No. 30/2009/QH12, Chapter 2, Section 4, Articles 25-28).

The Law on Construction defines general master planning as follows:

General master planning for urban construction [is the] organization of urban space and technical and social infrastructure works in compliance with overall master planning for socio-economic development and master planning for development of branches, ensuring national defense and security of each region and of the country from time to time.

The required contents of general plans vary by city size (Decree No. 37/2010/ND-CP). In general, urban master plans include the following (Decree No. 37/2010/ND-CP, Chapter 3, Section 1; No. 30/2009/QH12, Chapter 2, Section 4, Articles 25-28; Circular No. 10/2010/TT-BXD, Chapter 3, Article 10):

- Analysis and evaluation of natural, socio-economic, and infrastructural conditions
- Identification of development characteristics, objectives, and driving forces
- Identification of population size, land area, labor, and basic norms on social and technical infrastructure for the city
- Expected land use to meet development requirements
- Urban space development orientations, covering 1) identification of a development model and spatial structure for city, and 2) spatial development orientations for central and/or suburban areas
- Development orientations for urban technical infrastructure (including identification of restricted areas; city-wide ground floor levels; water drainage basins and networks; major urban transport/railway networks and stations; system of mass transit and parking lots; locations and sizes of key works and major distribution networks of water and power supply, lighting, communication, water drainage, solid waste treatment, and cemeteries, etc.)
- Strategic environmental assessment
- Priority investment programs and resources for implementation

A.4.3. ZONING PLANNING

Scale 1:2,000 – 1:5,000 **Geographic** Cities, towns, new urban centers Extent

Zoning plans, developed for functional areas of cities, towns, and new urban centers (No. 30/2009/OH12, Chapter 2, Section 1, Article 18), concretize general urban plans and establish a basis for detailed planning and investment projects. The period of a zoning plan is determined based on the period of the corresponding general plan and of urban management and development requirements (Urban Planning Law, Chapter 2, Section 4, Article 29).

The Law on Urban Planning (No. 30/2009/QH12) defines zoning planning as follows: Zoning planning is the division and determination of functions and norms on the use of planned urban land of land areas [and] networks of social and technical infrastructure facilities within an urban area in order to concretize a general plan.

Contents of zoning plans include the following (Decree No. 37/2010/ND-CP, Chapter 3, Section 1, Article 19; No. 30/2009/QH12, Chapter 2, Section 4, Article 29; Circular No. 10/2010/TT-BXD, Chapter 3, Article 11):

- Analysis and evaluation of natural conditions, the actual construction land status, population, society, architecture and landscape, and technical infrastructure
- Analysis of the general plan's provisions concerning the planned zone
- Identification of planned land use (for each lot), population, and social and technical infrastructure facilities criteria (for the whole planned zone)
- Identification of functional areas within the planned zone (including specifications around construction density, heights, and setbacks)
- Identification of principles and organizational requirements on spatial organization, architecture, and landscape for each functional area
- Planning on the system of urban technical infrastructure facilities in each street suitable to each development period of the urban center (including ground floor levels; car stations and parking lot locations; metro routes and stations; water and electricity demand/supply sources; locations and sizes of water plants, pump stations, power distribution stations, wastewater and waste treatment facilities, etc.)
- Strategic environmental assessment
- Priority investment programs and resources for implementation

A.4.4. DETAILED PLANNING

Scale 1:5,000
Geographic Extent Cities, towns, townships

Detailed plans, developed for functional quarters and zones to meet urban development and management requirements or construction investment needs, serves as a basis for granting construction permits and formulating construction investment projects (No. 30/2009/QH12, Chapter 2, Section 4, Article 30).

The Law on Urban Planning (No. 30/2009/QH12) defines detailed planning as follows:

Detailed planning is the division and determination of norms on the use of the planned urban land, requirements on management of architecture and landscape of each lot of land; arrangement of technical and social infrastructure facilities in order to concretize a zoning plan or general plan.

Contents of detailed plans include the following (Decree No. 37/2010/ND-CP, Chapter 3, Section 1, Article 20; No. 30/2009/QH12, Chapter 2, Section 4, Article 30; Circular No. 10/2010/TT-BXD, Chapter 3, Article 12):

- Analysis and evaluation of natural conditions, the actual construction land status, population, society, architecture and landscape, and technical infrastructure
- Analysis of the general and zoning plans' provisions concerning the planned zone
- Identification of criteria for use (for planned urban land), and social and technical infrastructure facilities criteria and arrangement (for the whole planned zone)
- Identification of functions and use criteria for planned urban land (including specifications around construction density, heights, and setbacks)
- Identification of standard heights and levels for first story; architectural form, colors, and materials for construction works and architectural objects (for each land lot); organizations of public trees, yards, gardens, and water surface in the planned zone
- Plan on the system of urban technical infrastructure facilities up to the boundary lot of land (including ground floor levels; car stations and parking lot locations; transport networks; water and electricity demand/supply sources; locations and sizes of water plants, pump stations, power distribution stations, wastewater and waste treatment facilities, etc.)
- Strategic environmental assessment

A.4.5. SPECIALIZED TECHNICAL INFRASTRUCTURE PLANNING

Scale | 1:10,000 - 1:25,000 **Geographic** | Centrally-controlled cities Extent

Developed for all centrally-controlled cities, specialized technical infrastructure plans build off the general master plans to establish a basis for infrastructure investment projects. This type of planning includes transportation planning, ground leveling/drainage, electricity supply planning, lighting system planning, water supply planning, wastewater planning, solid waste management planning, cemetery planning, and information and communication planning (Decree No. 37/2010/ND-CP, Chapter 3, Section 2; No. 30/2009/QH12, Chapter 3, Article 37):

- Urban transport planning must indicate land funds reserved for transport construction and development, locations and sizes of key works; organization of the urban transport system on the ground, overhead and underground; planning of mass transit; and the scope of protection and corridors for traffic safety.
- Base height and urban surface water drainage planning must indicate areas favorable for construction in each area and urban center; main basins for water drainage, and areas where construction is banned and restricted; standard construction ground floor level; network of surface water drainage and key works; and measures of preventing and mitigating damage caused by natural disasters.
- **Urban water supply** planning must indicate the need for and selection of water sources; locations and sizes of water supply works, including the networks of transmission and distribution, water plants, and cleaning stations; and the scope of protection of water sources and protection corridors of water supply facilities.
- **Urban wastewater drainage** planning must indicate the total volume of wastewater; locations and sizes of water drainage works, including networks of drainage pipelines, wastewater drainage plants, and stations; and sanitation distance from and corridors of protection of urban wastewater drainage works.
- Energy supply and lighting planning must indicate energy use needs; supply sources; requirements of locations and size of key works and transmission and distribution networks; safety corridors and scopes of protection of works; and comprehensive solutions for urban lighting.
- **Information and communications** planning must indicate information transmission routes and locations and sizes of satellite stations, switchboards, and auxiliary works.
- Solid waste treatment planning must indicate the total volume of solid waste; locations and sizes of transfer depots, solid waste treatment facilities, and auxiliary works; and sanitation distance from solid waste treatment facilities.
- Cemetery planning must indicate burial needs; locations, sizes, and boundaries of cemeteries; functional sub-zones; arrangement of technical infrastructure works; and sanitation distance from cemeteries.

A.5. PLANNING STAGES

There are seven primary stages of the urban planning process:

- 1. Planning requirements establishment. Includes identifying a rationale for plan establishment, establishing objectives and bases, and overviewing location and positions of the planned region.
- 2. Data collection.
- **3. Analysis.** Includes analysis and assessment of existing and natural conditions, relevant socioeconomic elements, and the status of infrastructures.
- **4. Selection of orientations.** Includes identifying driving forces for development, population size and structure, scenarios for development, and land use planning orientations.
- 5. Establishment of construction plan. Includes classifying zones (regional), establishing spatial arrangements, establishing orientations for technical infrastructure, and outlining requirements for urban planning management.
- **6. Assessment and approval.** Involves compilation, assessment, and approval of the final urban plan.
- 7. Plan implementation and management.

A.6. SECTORS

Urban and construction planning in Vietnam is typically organized by the following sector categories (VIUP, personal communication):

- Spatial and land use planning
- Elevation leveling and drainage
- Transportation
- Electricity supply and communication
- Water supply
- Sewage and sanitation

Regional, general, and zoning/detailed plans must cover all of the above listed sectors, while specialized technical infrastructure plans focus on only one sector at a time. According to the Law on Urban Planning (Chapter II, Section 5, Article 37), specialized technical infrastructure plans must focus on one of the following specific infrastructure categories:

- Urban transport
- Base height and urban surface water drainage
- Urban water supply
- Urban wastewater drainage
- Energy supply and lighting
- Information and communication
- Solid waste treatment
- Cemetery

A.7. PLANNING TYPE AND SECTOR SUMMARY

The Vietnam national CIMPACT-DST will include climate change impacts and guidance information specific to each described planning type. To reflect the need for "actionable" impacts and guidance information in climate adaptation mainstreaming (USAID, 2013, p. 5), the information will be organized by sector and will reflect the scale and contents specific to each planning type, as stipulated by the Decree No. 08/2005/ND-CP and Decree No. 37/2010/ND-CP, and summarized in Table A-4 below. To reflect differences among urban administrative levels, impacts and guidance information specific to cities and towns will also be provided, where available.

	Contents, by Planning Type					
Sector	Regional	Urban General/Master	Zoning/Detail	Specialized Technical Infrastructure		
Spatial Planning	Systems of centers, regions	Scopes or sizes of functional areas (including restricted and development areas	Organization of public trees, yards, gardens, and water surfaces	N/A		
Land Use Planning	Systems of centers, regions	Criteria for land use Identification of public centers, parks, and open space	Criteria for land use of planned urban land	N/A		
Urban Design		Architecture and landscape orientations for functional areas	 Architectural form, colors, and materials for construction works and architectural objects Building heights and setbacks 	N/A		
Transportation	 Networks, positions, and sizes of key infrastructure 	 Transport networks Locations and sizes of major routes and stations 	 Transport networks, cross-sections, boundaries Locations and areas of car stations and parking lots Metro routes and stations Technical trenches and tunnels 	 Actual construction and future demand External transport system, incl. locations and sizes of key works Classification and organization of road networks and railway routes Locations and sizes of key works Mass transit planning 		
Water Supply	 Networks, positions, and sizes of key infrastructure 	Water reserves, demands, and supply sources Locations, sizes, capacities of key works, transmission, and distribution routes	 Water demands and supply sources Locations and sizes of water plants and pump stations Water pipeline network and detailed technical parameters 	 Water sources, capacity, quality, pressure, etc. Water supply criteria Supply pipeline works Locations and sizes of supply facilities 		

Table A-4. Plan Contents, by Planning Type and Sector (Sources: Decree No. 08/2005/ND-CP; Decree No. 37/2010/ND-CP)

Table continued on page 34.

Table continued from page 33.

Wastewater	 Networks, positions, and sizes of key infrastructure 	 Total volumes Locations, sizes, capacities of key works, transmission, and distribution routes 	 Total volumes Water drainage network Locations and sizes of wastewater treatment facilities 	 Current drainage network, stations, capacities, pollution Criteria and parameters for volumes, receiving sources, and capacities Collection and treatment system Directions, locations, and sizes of networks, discharge points Water quality Locations and sizes of treatment plants
Ground Leveling and Drainage	 Networks, positions, and sizes of key infrastructure 	 Topography and restricted areas Water basins and drainage zones and direction Direction and location of water drainage works Standard ground floor levels 	Standard ground levels	 Current conditions and risk areas Restricted zones Evaluation of drainage and flooding Locations and sizes of drainage pump stations and other works Water basins, drainage sources/sinks Measures against disasters Maximum ground floor levels
Electricity Supply and Lighting	Networks, positions, and sizes of key infrastructure	 Power reserves, demands, and supply sources Locations, sizes, capacities of key works, transmission, and distribution routes 	 Power use demands and supply sources Locations and sizes of power distribution stations Medium-voltage power line grid and urban lighting system 	 Current supply and consumption, sources and grids Locations and sizes of transformer stations Power supply norms and demand Organization and forms of lighting Lighting criteria, demand forecasts, and solutions
Information and Communication	Networks, positions, and sizes of key infrastructure	Locations, sizes, capacities of key works, transmission, and distribution routes	Information and communication demands network	Current system and arrangement of wiresDemandsNetworks and transmission systems
Solid Waste	 Networks, positions, and sizes of key infrastructure 	 Total volumes Locations and sizes of treatment sites 	 Total volumes Locations and sizes of treatment facilities 	 Current sources, compositions, characteristics, volumes Criteria and source/volume forecasting Locations and sizes of collection points, transit stations, treatment facilities Treatment technologies
Cemetery	 Networks, positions, and sizes of key infrastructure 	Locations and sizes of cemeteries		 Current distribution, areas, operation, use, environmental impacts Demand forecasting, land use requirements, burial forms Locations and sizes of cemeteries

A.8. APPENDIX A: LITERATURE CITED

- Circular No. 01/2011/TT-BXD dated 20 February 2011 of the Ministry of Construction on guidelines for SEA for construction/urban planning projects.
- Circular No. 07/2008/TT-BXD dated 07 April 2008 of the Ministry of Construction on guidelines for formulation, appraisal, approval, and management of construction plans.
- Construction Law (No. 16/2003/QH11) ratified by the National Assembly of Socialist Republic of Vietnam dated 26 November 2003.
- Decision No. 03/2008/QD-BXD dated 31 March 2008 of the Ministry of Construction on contents of maps and reports for construction planning.
- Decision No.2623-QD-TTg dated 31 December 2013 of the Prime Minister on urban development response to climate change 2013 - 2020.
- Decree No. 08/2005/ND-CP dated 24 January 2005 of the Government on construction plannings.
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